

### ABSTRACT

Thermostable transaminase and aminotransferase enzymes derived from various *ammonifex*, *aquifex* and *pyrobaculum* organisms are disclosed. The enzymes are produced from native or recombinant host cells and can be utilized in the pharmaceutical, agricultural and other industries.

1. A method of producing a thermostable transaminase or aminotransferase enzyme, comprising: (a) culturing a host cell, which is a native or recombinant cell, under conditions which allow the cell to produce the enzyme; (b) isolating the enzyme from the cell; and (c) purifying the enzyme.